

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method of controlling a handover of a communication link, comprising:

transmitting information for an uplink synchronous transmission from a radio network controller to a first base station and a second base station;

~~resetting~~ reconfiguring a radio link between a mobile station and the second base station, based on the information for the uplink synchronous transmission; and

adjusting a base time for the uplink synchronous transmission of communication data by the mobile station to match the base time of an uplink synchronization scheme of the second base station when the mobile station moves from a first area corresponding to the first base station to a second area corresponding to the second base station.

2. (Original) The method of claim 1, wherein the information for the uplink synchronous transmission is an identifier of the uplink synchronous transmission scheme.

3. (Original) The method of claim 1, wherein the information for the uplink synchronous transmission is a scramble code of the uplink synchronous transmission scheme.

4. (Original) The method of claim 1, wherein the information for the uplink synchronous transmission is a channelizing code number of the uplink synchronous transmission scheme.

5. (Original) The method of claim 1, further comprising transmitting a measurement control command for measuring an uplink synchronous timing.

6. (Original) The method of claim 5, wherein the measurement control command includes a measurement type and a reporting characteristic.

7. (Currently Amended) The method of claim 1, wherein the radio link is ~~reset~~ reconfigured by converting a mode of the uplink synchronous transmission scheme.

8. (Currently Amended) The method of claim 1, further comprising:
transmitting the information on the uplink synchronous transmission from the radio network controller to another radio network controller, if the first and second base stations are controlled by different radio network controllers;

~~resetting~~ reconfiguring the radio link based on the information for the uplink synchronous transmission transmitted from the radio network controller; and

adjusting an uplink synchronous timing of the mobile station for the uplink synchronous transmission, on the basis of the ~~reset~~ reconfigured radio link, to match an uplink synchronous timing of the base station controlled by the other radio network controller.

9. (Original) The method of claim 8, wherein the information for the uplink synchronous transmission is an identifier of the uplink synchronous transmission scheme.

10. (Original) The method of claim 8, wherein the information for the uplink synchronous transmission is a scramble code of the uplink synchronous transmission scheme.

11. (Original) The method of claim 8, wherein the information for the uplink synchronous transmission is a channelizing code number of the uplink synchronous transmission scheme.

12. (Currently Amended) A method of changing a base time for a synchronous transmission scheme, comprising:

transmitting communication data to a first base station;

checking a second pilot signal from a second base station;

transmitting communication data to the second base station;

checking a first pilot signal from the first base station and rechecking the second pilot signal from the second base station; and

changing a base time for the synchronous transmission scheme used by a mobile station to a base time of the second base station in response to movement of the mobile station into an area served by the second base station.

13. (Original) The method of claim 12, wherein the synchronous transmission scheme is an uplink synchronous transmission scheme.

14. (Original) The method of claim 12, wherein transmitting the communication data to the second base station is performed when the intensity of the checked second pilot signal exceeds a threshold.

15. (Original) The method of claim 12, wherein changing the base time for the synchronous transmission scheme is done in accordance with the quality of a radio link between either the first base station and the mobile station or the second base station and the mobile station.

16. (Original) The method of claim 15, wherein the radio link is between the second base station and the mobile station.

17. (Original) The method of claim 12, wherein changing the base time for the synchronous transmission scheme is conducted in accordance with the number of mobile stations linked to either the first base station or the second base station.

18. (Original) The method of claim 17, wherein changing the base time for the synchronous scheme is conducted after comparing the number of mobile stations linked to the second base station with the number of mobile stations linked to the first base station.

19. (Currently Amended) A method of controlling a communication link, comprising:
measuring a first communication characteristic between a common terminal and a target terminal;

measuring a second communication characteristic between a current terminal and the common terminal;

determining whether to establish a synchronous communication link between the common terminal and the target terminal based on the measured first communication characteristic and the measured second communication characteristic;

establishing [[a]] the synchronous communication link between the common terminal and the target terminal, the synchronous communication link established in accordance with a timing adjustment value derived from the first communication characteristic measurement; and

transitioning communication service support for the common terminal from [[a]]
the current terminal to the target terminal, using the synchronous communication link.

20. (Original) The method of claim 19, wherein the first communication characteristic
is a communication propagation time.

21. (Canceled)

22. (Currently Amended) The method of claim [[21]] 19, wherein the second
communication characteristic is a received quality of a signal transmitted separately by the target
terminal and the current terminal and received by the common terminal.

23. (Currently Amended) The method of claim [[21]] 19, wherein the second
communication characteristic is the amount of communication traffic supported by the target
terminal and by the current terminal.

24. (Currently Amended) The method of claim 19, wherein: ~~the action of establishing~~
~~a~~ the synchronous communication link further comprises, includes:

activating a communication channel for the synchronous communication link
between the target terminal and the common terminal;

synchronizing the common terminal with the synchronous communication link based on the timing adjustment value;

changing a mode of communication between the target terminal and the common terminal from an asynchronous mode to a synchronous mode; and

changing a mode of communication between the current terminal and the common terminal from the synchronous mode to the asynchronous mode.

25. (Original) The method of claim 19, further comprising:

establishing a communication channel between the common terminal and the target terminal through a soft handover procedure, prior to measuring the first communication characteristic; and

releasing a communication channel between the common terminal and the current terminal after transitioning the communication service support.

26. (Original) The method of claim 19, further comprising:

communicating a request from a source network controller to a target network controller for the target network controller to initiate the measurement of the first communication characteristic, wherein

the source network controller manages the operation of the current terminal and the target network controller manages the operation of the target terminal.

27. (Currently Amended) A system for managing a communication link, comprising:
a common terminal that communicates with both a target terminal and a current terminal and measures a communication characteristic between the common terminal and the target terminal; and

a network controller that manages the operation of the current terminal and the target terminal, the network controller establishes a synchronous communication link between the common terminal and the target terminal based on a timing adjustment value derived from the communication characteristic measurement and transitions communication service support for the common terminal from the current terminal to the target terminal, using the synchronous communication link, wherein the network controller establishing the synchronous communication link by changing a mode of communication between the target terminal and the common terminal from an asynchronous mode to a synchronous mode and changing a mode of communication between the current terminal and the common terminal from the synchronous mode to the asynchronous mode.

28. (Canceled)

29. (New) A method of controlling a communication link, comprising:
measuring a first communication characteristic between a common terminal and a target terminal;

establishing a synchronous communication link between the common terminal and the target terminal, the synchronous communication link established in accordance with a timing adjustment value derived from the first communication characteristic measurement, wherein establishing the synchronous communication link includes changing a mode of communication between the target terminal and the common terminal from an asynchronous mode to a synchronous mode and changing a mode of communication between a current terminal and the common terminal from the synchronous mode to the asynchronous mode; and transitioning communication service support for the common terminal from the current terminal to the target terminal using the synchronous communication link.

30. (New) The method of claim 29, wherein establishing the synchronous communication link includes:

activating a communication channel for the synchronous communication link between the target terminal and the common terminal; and

synchronizing the common terminal with the synchronous communication link based on the timing adjustment value.